

6836-214

11/19/2012

1/7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Ms. Joanna Holcombe
Lonza Inc.
90 Boroline Road
Allendale, NJ 07401

NOV 19 2012

SUBJECT: Barquat Molluscicide 50
EPA Registration Number: 6836-214
Application Dated: July 24, 2012
Receipt Date: July 25, 2012

Dear Ms. Holcombe:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

- To make minor label changes.
- To update the marketing language.
- To add Directions for use for oil and gas applications.

General Comments

A stamped copy of the accepted labeling is enclosed. Submit 1 copy of your final printed label before distributing or selling the product bearing the revised labeling. Should you have any questions concerning this letter, please contact Emilia Oiguenblik at (703) 347 0199 or Velma Noble at (703) 308-6233.

Sincerely,



Velma Noble
Product Manager (31)
Regulatory Management Branch I
Antimicrobials Division (7510P)

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

2/7

Note to reviewer:

[Items in brackets [AAA] are optional and may/may not be included on final label]

{Items in braces {AAA} are for information purposes and will not appear on final label}

BARQUAT MOLLUSCICIDE 50

[For the Control of Mollusks and Algae, Bacterial and Fungal slimes in Once-Through and Closed-Cycle Fresh and Sea Water Cooling Systems, as a Slimicide for Pulp and Paper Mills]

[A liquid microbiocide for use in controlling the growth of sulfate reducing and slime forming bacteria in oil and gas applications.]

Active Ingredient:

Alkyl (C14, 50%; C12, 40%; C16, 10%) dimethyl benzyl ammonium chloride 50.0%

Other Ingredients: 50.0%

Total 100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER [PELIGRO]

[Note to reviewer: Although this product has a "Danger" signal word, as per the EPA label review manual "The Agency may permit reasonable variations in the placement of the First Aid statement as long as the reference statement, "See First Aid (or Statement of Practical Treatment) on (identify appropriate panel)" appears on the front panel." Due to small package sizes and / or addition of Spanish language phrases, placing the First Aid statements on the front panel may not be practical. If the First Aid Statements are placed on the front panel of the final graphic label, that portion of the statement below will not be used :]

See [side] [back] [right] [left] panel for Additional Precautionary Statements [and First Aid]

FOR HELP IN A CHEMICAL EMERGENCY CALL CHEMTREC 800-424-9300

BEFORE USING CONSULT MATERIAL SAFETY DATA SHEET

EPA Registration No. 6836-214

EPA Establishment No. (insert EPA Est. No. here)

Net Contents: (as indicated on container)

[DOT symbols]

[Country of origin (insert country)]

[Manufactured in (insert country)]

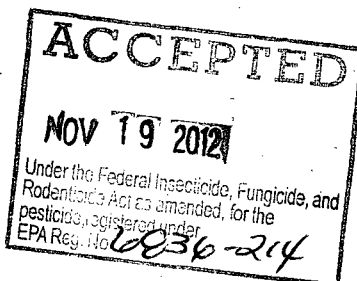
[Barcode]

Manufactured by:

LONZA INC.

90 Boroline Road

Allendale, New Jersey 07401



PRECAUTIONARY STATEMENTS**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER. CORROSIVE. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Wear chemical goggles, protective clothing, and rubber gloves. May be fatal if swallowed, absorbed through the skin, or inhaled. Do not breathe vapor. Wear a MSHA/NIOSH-approved dust/mist filtering respirator number TC-21C or a NIOSH approved respirator with any N, R, P, or HE filter. Wash thoroughly with soap and water after handling and before eating, drinking, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

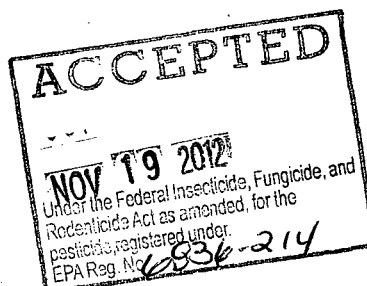
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.



*{If the following Spanish statement is used, it must appear directly above DIRECTIONS FOR USE.}
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)*

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

BARQUAT MOLLUSCICIDE 50 IS INTENDED FOR INDUSTRIAL USE

FOR THE CONTROL OF MOLLUSCA, BACTERIA, FUNGI AND ALGAE

When used as directed, **Barquat Molluscicide 50** helps to effectively control algae, bacteria, fungi and macrofouling species such as clams, barnacles, and mussels in commercial and industrial recirculating and once-through cooling systems, influent water systems, brewery pasteurizers, auxiliary water systems and waste water systems. Product addition is to be made with a metering pump. Product is fed continuously or on an intermittent basis depending in the degree of system fouling and retention time.

BACTERIAL, FUNGAL, AND ALGAE CONTROL IN RECIRCULATING, AUXILIARY AND WASTE WATER SYSTEMS, AND PASTEURIZERS

INITIAL DOSE: Add **Barquat Molluscicide 50** at an initial dosage of 0.2-0.4 gallons per 5,000 gallons of system water [20-40 ppm]. Repeat until the desired level of control is achieved. Heavily contaminated systems must be pre-cleaned.

SUBSEQUENT DOSE: Once control is achieved, add maintenance dosages of 0.2-0.8 quarts of **Barquat Molluscicide 50** per 5,000 gallons of system water [5-20 ppm] weekly or as needed to maintain control. Apply **Barquat Molluscicide 50** to a point in the system where it will be uniformly mixed and distributed, such as the tower sump.

MACROFOULING CONTROL IN RECIRCULATING AUXILIARY COOLING WATER AND WASTE WATER SYSTEMS

INITIAL DOSE: For the control of macrofouling growth such as clams, barnacles, and mussels, add 0.3-2.6 fluid ounces of **Barquat Molluscicide 50** per 1,000 gallons of system water [1-10 ppm]. Repeat as necessary to achieve control.

SUBSEQUENT DOSE: When control is evident add 0.3-1.3 fluid ounces of **Barquat Molluscicide 50** per 1,000 gallons of system water (1-5 ppm) as needed to maintain control.

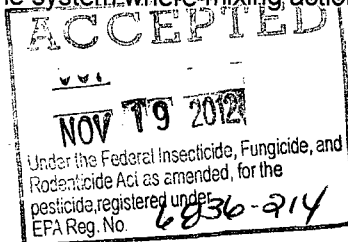
Do not apply to potable or domestic water systems. Do not use water containing residues from use of this product to irrigate crops used for food or feed. Use of the product in either public/municipal or single or multiple family private/residential potable/drinking water systems is strictly prohibited. Use of the product in any cooling water system that discharges effluent within 1/4 mile of either a public/municipal or single or multiple family private/residential potable/drinking water intake is strictly prohibited.

Heavily contaminated systems must be precleaned.

PAPER MANUFACTURING [FOR CONTROL OF BACTERIAL, FUNGI AND ALGAE]

Barquat Molluscicide 50 can be used as a slimicide in the manufacture of paper and paperboard that contacts food.

Apply 0.05-10 gallons of **Barquat Molluscicide 50** per ton of paper produced. Alternatively, apply 0.1-20 gallons of **Barquat Molluscicide 50** per 100,000 gallons of white water to be treated [0.5-100 ppm]. Additions of **Barquat Molluscicide 50** are made at a point in the system where mixing action is good.



ONCE-THROUGH COOLING WATER SYSTEMS

Wear safety glasses, rubber gloves and impervious apron. Add product directly from drum or add the product at a point where it will be mixed uniformly. Do not discharge without performing proper deactivation. To perform deactivation use Bentonite Clay. The minimum ratio to be used is 5 ppm of clay to 1 ppm of product. Do not use more than 4 times a year. Treatment time can not exceed 120 hours/application. Avoid oxidizers and reducing agents. Product is cationic and is not to be mixed with soap or anionic surfactants.

INTERMITTENT FEED

INITIAL DOSE: When the system is noticeably fouled, add **Barquat Molluscicide 50** at a dosage of 0.3-2.6 fluid ounces per 1,000 gallons of water [1-10 ppm] based on system flow rates. The minimum treatment period should be 6 to 24 hours. Repeat as necessary to achieve control.

SUBSEQUENT DOSE: When control is evident, add **Barquat Molluscicide 50** at a dosage of 0.15-1.3 fluid ounces per 1,000 gallons of water [0.5-5 ppm] based on system flow rates on an as needed basis to maintain control. Frequency of feed should be tied to an in-plant monitoring program for macrofouling growth.

CONTINUOUS FEED

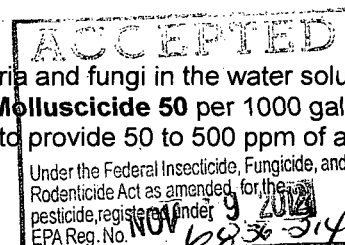
INITIAL DOSE: When the system is noticeably fouled, add **Barquat Molluscicide 50** at a dosage of 0.15-1.3 fluid ounces per 1,000 gallons of water [0.5-5 ppm] based on system flow rates. Continue to feed until needed control is achieved.

SUBSEQUENT DOSE: Maintenance control can be effective through continuous feed of **Barquat Molluscicide 50** at a dosage of 0.05-0.5 fluid ounces per 1,000 gallons of water [0.2-2 ppm] based on system flow rates.

Heavily contaminated systems must be precleaned.

WATER SOLUTIONS TO PREPARE FIBER GLASS SIZING

Barquat Molluscicide 50 can be used as a biocide for control of bacteria and fungi in the water solutions that are used to prepare fiber glass sizing. Add 0.1 to 1 gallon of **Barquat Molluscicide 50** per 1000 gallons of water that is to be used to prepare a fiber glass sizing solution in order to provide 50 to 500 ppm of active quaternary amine.



OIL FIELD AND PETROCHEMICAL OPERATIONS

For use in oil field and/or petrochemical water subsurface injection systems of secondary and/or tertiary oil recovery systems to reduce the number of anaerobic bacteria, aerobic bacteria, and sulfate reducing bacteria.

Barquat Molluscicide 50 is typically used at 50 – 100 ppm active ingredient. For each application area, the dose can vary from 25 – 200 ppm as active depending upon the application and location of chemical injection, which is equivalent to approximately 0.3 – 2.2 ounces per barrel of fluid.

This product is to be applied at a point in the recovery system where it will be uniformly mixed, such as at the screens, storage tanks, and other mixing device locations.

Use a shock dose one or more times weekly of 0.85 – 1.7 gallons per 100 barrels [4200 gallons] of fluid until control is achieved. Thereafter, use a maintenance dose of 0.23 – 0.85 gallons per 100 barrels [4200 gallons] of fluid.

Re-treat with a weekly shock dose if re-contamination is observed.

OIL FIELD WATER FLOOD OR SALT WATER DISPOSAL SYSTEMS: (Do not apply in Marine or Estuarine Oil Fields!)

For the control of slime forming and sulfate reducing bacteria in oil field water flood or salt water disposal systems, add 25 - 100 ppm [active] **Barquat Molluscicide 50** [6.4 – 26 oz. per 1000 barrels [42000 gallons] of water] continuously. Levels for effective control will vary depending on conditions at the site.

6/7

Product addition must be made with a metering pump. This product must be applied where it will dispense most rapidly and uniformly to the desired area of treatment. Product must be slug fed then fed continuously or on an intermittent basis depending on the degree of system fouling.

Heavily fouled systems must be precleaned.

Slug: Apply 0.6 – 1.2 gallons per 3000 gallons [100 - 200 ppm active] of water for 4-8 hours per day until desired level of control is achieved. To maintain the system in an acceptable manner, utilize a continuous treatment with the microbiocide or apply intermittent doses.

Intermittent Feed: The frequency of intermittent doses will vary with individual systems. Apply 0.15 - 0.6 gallons per 3000 gallons [25-100 ppm active] of water for 4-8 hours per day, one to four times a week as needed to maintain control.

Continuous Feed: Fouled systems must be slug treated to get initial control, followed by continuous treatment to maintain control. Apply 0.15 – 0.3 gallons per 3000 gallons of water [25-50 ppm active] continuously.

PACKER FLUIDS, FRACTURING FLUIDS, COMPLETION AND WORKOVER FLUIDS

Add 50 – 400 ppm **Barquat Molluscicide 50** [0.2 to 1.7 gallons **Barquat Molluscicide 50** per 100 barrels [4200 gallons] of fluid] to a freshly prepared fluid depending on severity of contamination at a point where uniform mixing will occur.

FOR TREATMENT OF SOURCE WATER [Post Hydraulic Fracturing] Add 2.1 – 17 gallons **Barquat Molluscicide 50** per 1000 barrels [42000 gallons] of water as needed to maintain control.

HYDROTESTING

Water used to hydrotest pipelines or vessels must contain 50 – 400 ppm **Barquat Molluscicide 50** [6.4 – 51 ounces **Barquat Molluscicide 50** per 1,000 gallons flood water] depending on water quality and length of time equipment will be idle.

GAS STORAGE WELLS AND SYSTEMS

Individual injection wells must be treated with 50 – 200 ppm **Barquat Molluscicide 50**. Injections must be repeated as needed to maintain control.

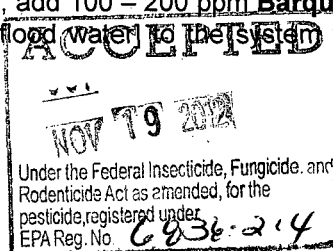
Individual drips must be treated with a sufficient quantity of **Barquat Molluscicide 50** to produce a concentration of 200 to 400 ppm **Barquat Molluscicide 50** when diluted by the water present in the drip. Injections must be repeated as needed to maintain control.

OIL AND GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

Barquat Molluscicide 50 must be added at a point in the system where uniform mixing will occur. The application must be conducted to ensure maximum distribution of **Barquat Molluscicide 50** through the entire internal surface of the pipeline. Injections to the system must be weekly, or as needed to maintain control.

Slug dose: For a noticeably fouled system, add 200 - 400 ppm **Barquat Molluscicide 50** [26 to 52 ounces **Barquat Molluscicide 50** per 1,000 gallons flood water] for 4 – 8 hours based on flow rates. Repeat as necessary until control is achieved.

Subsequent Treatment: Once control has been achieved, add 100 – 200 ppm **Barquat Molluscicide 50** [13 – 26 ounces **Barquat Molluscicide 50** per 1,000 gallons flood water] to the system weekly, or as needed to maintain control.



7/7
Continuous treatment: Barquat Molluscicide 50 can be dosed continuously at a level of 50 – 100 ppm [6.5 to 13 ounces **Barquat Molluscicide 50** per 1,000 gallons flood water].

PIPELINE PIGGING AND SCRAPING OPERATIONS

Add **Barquat Molluscicide 50** to a slug of water following the scraper. Add **Barquat Molluscicide 50** at 200 - 400 ppm [2.6 to 5.2 ounces **Barquat Molluscicide 50** per 100 gallons water] depending on the length of the pipeline and severity of biofouling.

This product weighs 8.17 lbs./gallon (at 20°C)

{Note to reviewer: For Nonrefillable Containers, Ready to Use Product 5 gallons or less}

STORAGE AND DISPOSAL

Store in original container in areas inaccessible to children. Nonrefillable container. Do not reuse or refill this container. Wrap [container] and put in trash or offer for recycling if available.

{or}

Store in original container in areas inaccessible to children. Nonrefillable container. Do not reuse or refill this container. Wrap [container] and put in trash or offer for reconditioning if appropriate.

{Note to reviewer: For Nonrefillable Containers, Ready to Use Product over 5 gallons}

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Open dumping is prohibited. Store in original container in areas inaccessible to children.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Nonrefillable container. Do not reuse or refill this container.

[Plastic Containers:] Triple rinse (or equivalent). Offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[Metal Containers:] Triple rinse (or equivalent). Offer for recycling if available or puncture and dispose of in sanitary landfill or by other procedures approved by state and local authorities. DO NOT cut or weld metal containers.

